

EXHIBIT A

# Patent Disclosure

**To:** Patent Committee  
**CC:** William Kolegraff, Esq.  
**From:** Lester J. Anderson  
**Date:** February 14, 2002  
**Title:** Mobile Handset as a TTY Device  
**Inventors:** Tom Angelopoulos & Aaron Teague  
**Background:**

DISCLOSURE STATUS		
<input checked="" type="radio"/> APPROVED	<input type="radio"/> REJECTED (Circle One)	<input type="radio"/> HOLD
PRIORITY _____ (Insert 1-10 with 1 as the Highest Priority)		

**a) Problem To Be Solved**

- Eliminate the need for an external TTY Device when using a mobile handset

**b) Known Related Technology**

- TTY Devices that attach to land-line telephones
- FCC Requirement to make Mobile handsets work with TTY Devices

**Summary Of The Invention:**

- Use a mobile handset as a TTY Device
- The TTY Device would take text input from the key pad of the mobile handset
- The idea can also be implemented on a PDA that has communication ability

**Advantages Of The Invention:**

- Increased sales of mobile handsets to those that require TTY devices.
- Increased TTY accuracy
- Easy for user to operate
- Lower cost for user
- User is not required to carry a separate TTY Device and the mobile handset

**Patent Department Recommendation:**

Request patent committee recommendation.

**Inventor Disclosure:****Abstract:**

The following document discloses the idea of using the mobile as a TTY device.

**Background:**

An FCC regulation requires every mobile manufactured contain an implementation of TTY encoding/decoding. Currently, mobiles must use an external TTY device to generate the Baudot Tones used in the encoding/decoding of the text data. To use this feature, users are required to purchase an external TTY device.

**Decription:**

The idea is to use the mobile as a TTY device. This would take the functionality of an external TTY device and add it to the mobile features. The new implementation would take text input from the keypad or a PDA module. This replaces the use of the external keyboard. Next, the mobile would have a Character/Baudot Tone conversion library stored in memory where, on the transmit side, each character entered would be mapped to a particular combination of frequencies, just as the external device would work. The characters would then display on the LCD of the mobile rather than the external device. The mobile would then generate the tones, instead of the external device. Since the mobile is generating the tones, there is no

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longer a need for a tone detector. Finally, the encoding process would not change from the previous implementation.

On the receive side, the mobile would receive and decode TTY data as in the current implementation. But, instead of sending the decoded tones to the external device, the tones would be mapped again to the Library where they would be converted to characters. The characters would then be displayed on the LCD of the mobile.

Block diagrams of the current and new implementations can be found on the next page.

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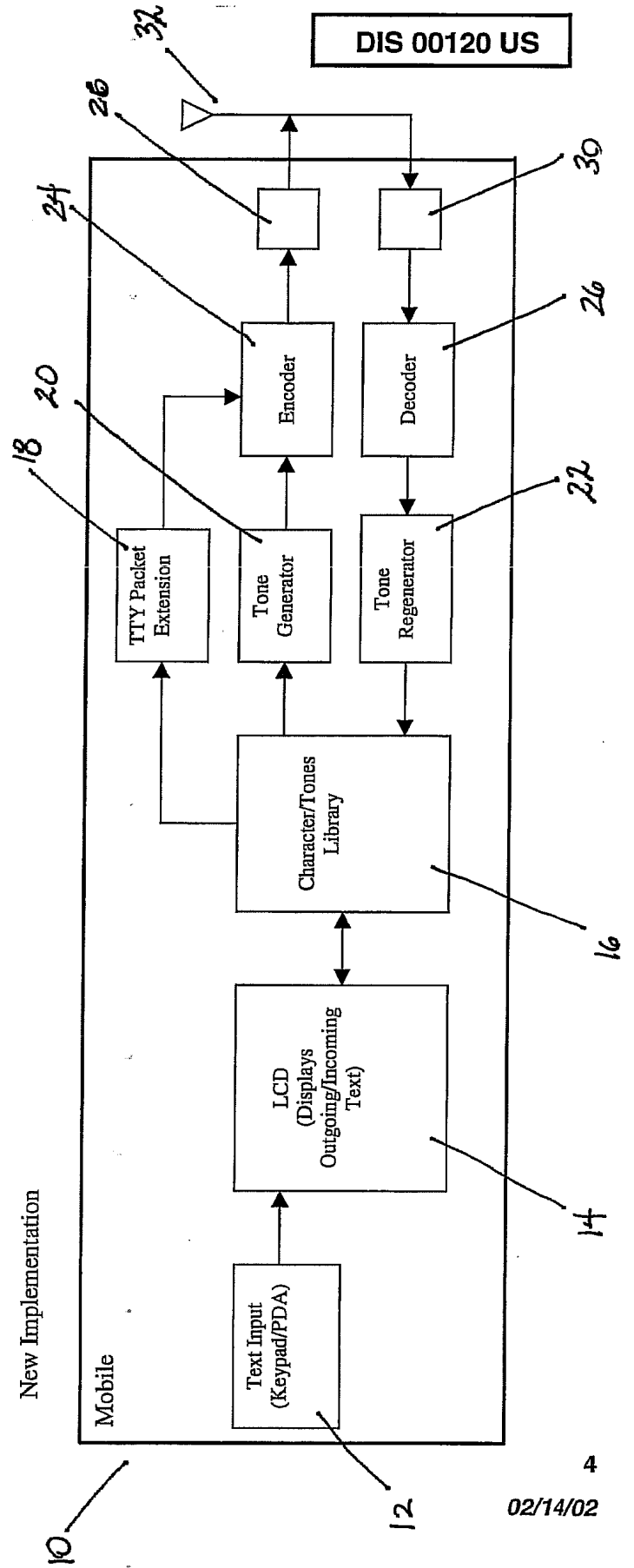
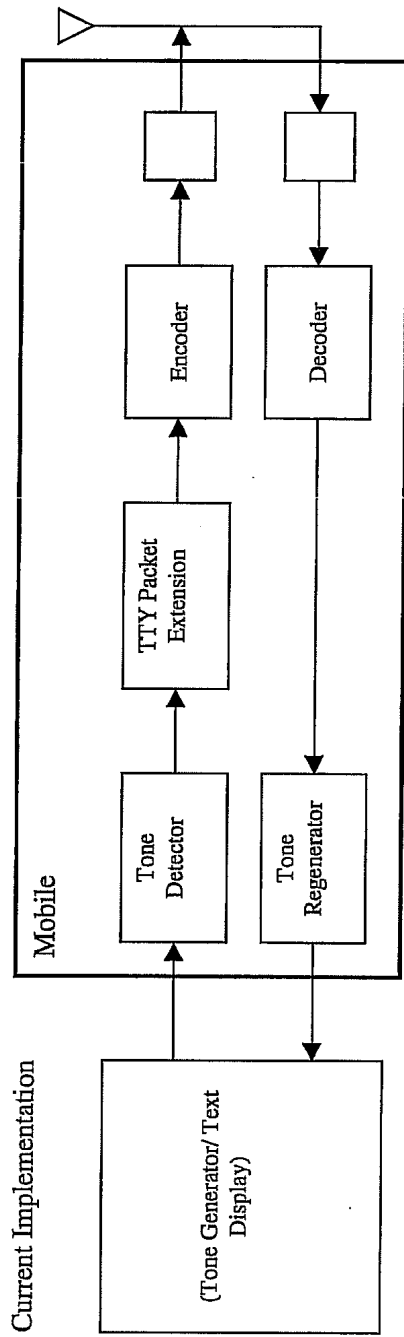


Fig. 1